



THE NAVY *Flight* SURGEON

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- WHERE
- HOW
- WHEN



DEPARTMENT OF THE NAVY

NAVMED P-5077



CHIEF OF NAVAL OPERATIONS

In his unceasing search, for knowledge of himself and the universe about him, Man's magnificent scientific achievements have projected him, literally, towards the stars and into strange, often harsh environments. In his parallel effort to cope with his susceptibility to disease and injury, Man has made equally remarkable explorations and discoveries concerning his physical self. Consistently and encouragingly, the measure of Man's total progress has been his success in insuring that his individual capabilities and well-being are undiminished under the stresses and demands of new and unusual situations. For their significant part in this accomplishment, the military medical specialist may take considerable pride.

For this reason, the continued and progressive emphasis on the procurement and training of aerospace medicine personnel -- personnel competent beyond all previous requirements -- is to me an effort which is vital in the most realistic sense of the word.

The Naval Flight Surgeons today have earned an envied status of dual respect from both the exacting professions of naval aviation and the field of medicine, and I am confident that their contributions, today and tomorrow, will continue to assist the Navy and the Nation to achieve a better future for all Mankind.



David L. McDonald
DAVID L. McDONALD

The student naval flight surgeon receives his basic flight training in the T-34 (Beechcraft Mentor). See Page 5.

WHO can become a flight surgeon in the Navy?

Physicians who qualify for a commission in the Navy may become flight surgeons PROVIDED they

- Volunteer for such training and duty
- Are aeronautically adapted and physically qualified—

Physical standards for student naval flight surgeons are generally similar to those for commission as a medical officer. (Visual acuity of 20/100 in each eye, correctable to 20/20, is required.) In order to qualify for solo flight during basic training, visual acuity must not be less than 20/30 in each eye, unaided by glasses. Failure to meet this requirement does not disqualify for other indoctrinal flight training, leading to the designation of flight surgeon.

- Sign a service agreement to remain on active duty for a period of two years following their completion of the course of instruction or six months beyond their current obligated service, whichever is longer.


SURGEON GENERAL, NAVY

This brochure has been prepared to acquaint you with the Navy's aerospace medicine program and to answer those questions most frequently asked by medical students and young physicians.

The Naval Flight Surgeon performs a vital service for his country in a challenging and rewarding career. His primary function is the selection and maintenance at maximum effectiveness of personnel with the capability of performing a complex mental task in a hazardous environment. He must have an intimate knowledge and understanding of the personnel within his activity and of the stresses to which they are subjected.

The integration of the physical, engineering, and biological sciences in aeronautical and space technologies has led to a better understanding of human physiology and psychology at high altitudes and supersonic speed and the involvement of mechanical devices which enable man to function efficiently and comfortably under trying environmental conditions. The Navy's traditionally unique ability to support man in confined and isolated spaces against strange and hostile environments is a major factor in our nation's progress to "conquer" space.

Excellent opportunities are available to flight surgeons for further postgraduate training leading to certification in Aerospace Medicine by the American Board of Preventive Medicine. The flight surgeon may also profitably combine aerospace medicine practice with a clinical specialty.


R. B. BROWN
Vice Admiral, MC, USN
Surgeon General, U. S. Navy

WHAT specialized training does a flight surgeon receive?

Student flight surgeons are ordered to the Naval Aviation Medical Center, Pensacola, Florida, for a six-month course of instruction. The course is divided into two phases. The first four and one-half months are devoted to didactic and clinical studies, including special training in the fields particularly important to aerospace medicine such as ophthalmology, otolaryngology, cardiology, neuropsychiatry, and cardio-respiratory physiology. The course includes training and experience in the special problem areas created by the stresses present in the environment of the aviator, by use of such facilities as low pressure chambers, ejection seat training devices, the human centrifuge, and the disorientation device.



COURSE IN AEROSPACE MEDICINE
U.S. NAVAL AEROSPACE MEDICAL INSTITUTE
NAVAL AVIATION MEDICAL CENTER • PENSACOLA, FLORIDA

Air Evacuation	2	367 Hours in Lectures
Aviation Dentistry	2	
Psychology	3	
Surgery	4	
Aviation Pathology	5	
Industrial Medicine	5	
Search and Rescue	5	
Aviation Physical Examinations	6	
Preventive Medicine	6	
Research Orientation	6	
Dermatology	11	
Survival Land	11	
Survival Water	11	
Aviation Safety and Crash Investigations	12	
Special Guest Lectures	14	
Radiobiology (Biophysics)	16	
Otorhinolaryngology	25	
Special Board of Flight Surgeons	30	
Aviation Physiology	35	
Cardiology	39	
Neuropsychiatry	48	
Ophthalmology	71	
Audiometry Laboratory	3	132 Hours in Clinics
Cardiology Laboratory	3	
Shipboard Orientation Cruise	9	
Hospital Clinic	12	
Neuropsychiatry Clinic	12	
Operational Aviation Medicine	12	
Ophthalmology Clinic	12	
Otorhinolaryngology Clinic	12	
Physical Training	12	
Aviation Physiology Laboratory	45	

TOTAL HOURS OF INSTRUCTION = 499

DOES the student flight surgeon learn to fly?

YES. The second phase of training consists of six weeks' flight and basic Ground School training.

SUMMARY OF STUDENT NAVAL FLIGHT SURGEON TRAINING			
STAGE		FLIGHT	
STAGE		FLIGHTS	HOURS
Helicopter Familiarization and Survival		2	2.0
Pre-Solo		13	17.6
Acrobatics		2	2.6
Instrument		1	1.3
Formation		1	1.0
Carrier Landing		1	1.0
Jet Familiarization		1	1.3
TOTALS		21	26.8
FLIGHT SUPPORT		PERIODS	HOURS
SUBJECT		PERIODS	HOURS
Synthetic Flight		5	5.0
Flight Procedures		15	19.3
TOTALS		20	24.3
ACADEMIC		PERIODS	HOURS
SUBJECT		PERIODS	HOURS
Leadership		11	11.0
Naval Orientation		27	27.0
World Affairs		14	14.0
Military		14	14.0
Physical Fitness		3	3.0
Survival		12	12.0
Swimming		*11	*22.0
Indoctrination		8	8.0
Meteorology		5	5.0
Engineering		11	11.0
Naval Aviation Orientation		3	3.0
Flight Rules and Regulations		3	3.0
Aerodynamics		5	5.0
Visual Navigation		3	3.0
Voice Communications		5	5.0
Communications (Code)		3	3.0
SPDB Observations		1	1.0
Crash and Salvage Orientation		1	1.0
Tower Observation		1	1.0
Safety (AAR)		1	1.0
Helicopter Aerodynamics		1	1.0
Helicopter Operations		2	2.0
Helicopter Engineering		2	2.0
Ejection Seat		1	1.0
TOTALS		137	138.0

*In addition to the two-week syllabus.

Naval Aviation Medical Center, Pensacola, Florida

Lecture rooms, research laboratories, training equipment, and other supporting facilities are housed in the U.S. Naval Aerospace Medical Institute.

The U.S. Naval Hospital is a fully accredited hospital, having a normal bed capacity of 571 beds. Clinical aspects of the flight surgeon's training are taught here and at the busy Air Station Dispensary.



WHY become a flight surgeon?



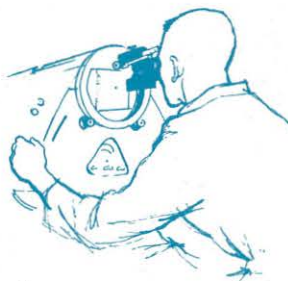
- Flight surgeons can qualify for flight training leading to the designation of Naval Aviator. The duration of this training is approximately 18 months. Applications are desired from flight surgeons who have completed a tour of duty with the Fleet. Naval Aviator Flight Surgeons are assigned to test pilot programs, experimental squadrons, human engineering test facilities, and research programs.



- Close association with Naval and Marine Aviators, who are among the most select men in uniform, is a rewarding experience in itself.



- Medical practice at the larger Naval Air Stations and aboard aircraft carriers is comparable to hospital practice. The carriers are equipped to provide definitive care for large numbers of personnel in the Carrier Task Force.



- Flight surgeons qualify for further post-graduate training leading to certification by the American Board of Preventive Medicine in Aerospace Medicine. This is a rapidly growing, challenging medical specialty. Included in this training is an academic year in Preventive Medicine and Public Health at one of the approved civilian universities. During the residency training phase, the candidate may pursue his particular interests with emphasis on clinical, research or general aspects of aerospace medicine practice.



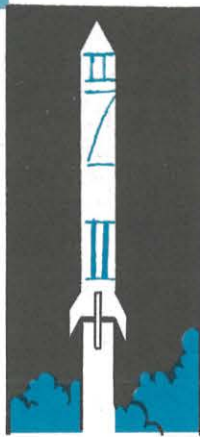
•Included in his responsibilities to his flying unit is the diversified care of the aviator's dependents. Thus, the flight surgeon's professional growth in general medicine practice is enhanced.

•Flight surgeons may profitably combine their aerospace medicine practice with a clinical specialty such as ophthalmology, medicine, surgery, otorhinolaryngology, psychiatry, and others. Certification in pathology, in addition to aerospace medicine, is another example of a long-range career pattern for flight surgeons.



•Excellent opportunities for travel, both at sea and at foreign stations, are open to flight surgeons.

•Naval Flight surgeons and naval laboratories have made major contributions to space medicine. The vast effort to explore space presents unlimited opportunities to the aerospace medicine specialist.



WHERE do flight surgeons serve?



NAVAL AIR STATIONS

More than 50 naval air stations are located along the east, west and gulf coasts, Alaska and in continental United States.

NAVAL AIR FORCE ATLANTIC

Aircraft carriers rotate and deploy to the Mediterranean area and other Atlantic ports.

RESEARCH FACILITIES

Principal aviation research facilities are located in the following areas: Washington, D.C., Philadelphia, Pa., Pensacola, Fla., and Point Mugu, Calif.

WHAT ARE THE PAY AND ALLOWANCES?

A newly commissioned Lieutenant flight surgeon, on duty involving flying, with dependents receives a monthly income of **\$1,008.13**. Additional benefits, which considerably increase the value of the service doctor's pay, include medical care, ship's store and commissary privileges, dependents' transportation to and from permanent duty stations, and, most important, the attractive insurance aspects of survivor's benefits and retirement income.



OVERSEAS BASES

Some of the duty stations abroad are located in: Japan, Hawaii, Philippines, Marianas, Okinawa, Spain, Italy, England, and the Caribbean Islands.

NAVAL AIR FORCE PACIFIC

Aircraft carriers rotate and deploy to western Pacific and Asiatic ports.

MARINE ACTIVITIES

Air Fleet Marine Forces, Atlantic and Pacific, have several continental and overseas bases.

HOW to apply.

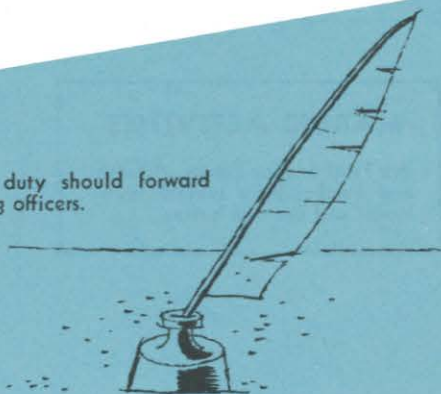
When applying for a commission in the Navy Medical Corps through your local Navy Recruiting Station or by enrollment in the Navy Ensign Program, candidates for flight surgeon training may simply address a letter of request similar to the following:

From: Chief, Bureau of Medicine and Surgery
To: Department of the Navy
Washington, D.C. 20390
Subj: Course of instruction in aerospace medicine;
request for

1. It is requested that I be considered for a course of instruction in aerospace medicine for the class convening on _____
2. If approved for this course of instruction, I agree to remain on active duty for two years beyond the completion of the course or for six months beyond my current obligated service, whichever is longer.

Signature

NOTE: Medical officers on active duty should forward their application via their commanding officers.



WHEN . . . Why not now?

A flight surgeon, who is also a naval aviator, checks his high performance jet aircraft prior to solo flight. See Page 6.





BUREAU OF MEDICINE AND SURGERY.